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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/640,626

08/12/2003

Arra E. Avakian

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EXAMINER

PANTOLIANO JR, RICHARD

ART UNIT

PAPER NUMBER

2194

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

03/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/640,626	<b>Applicant(s)</b> AVAKIAN ET AL.	
	<b>Examiner</b> Richard Pantoliano Jr	<b>Art Unit</b> 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 19 December 2006.
- 2a) ☒ This action is FINAL.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>20061219</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Amendment*

1. This Office Action is filed in response to amendments filed on **19 December 2006** for Application# **10/640,626**. Originally presented **Claim 1** has been cancelled and new **Claims 2-22** are currently pending and have been considered below.

### *Claim Objections*

2. **Claims 2, 5, 9, and 16** are objected to because of the following informalities:
  - a) **Claims 2, 6 and 16**: the term "bytescodes" appears to be a typographical error; and
  - b) **Claim 5**: the claim ends with a semicolon rather than a period.
3. Appropriate correction is required.

### *Claim Rejections - 35 USC § 101*

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.
5. **Claims 2-22** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The current policy of the Patent Office in regard to statutory inventions under 35 U.S.C. § 101 for method claims and claims that recite a judicial exception (e.g. software) is that the claimed invention recite a practical application. Practical application can be provided by a physical transformation or a

Art Unit: 2194

useful, concrete and tangible result. No physical transformation is recited and additionally, the final result of the claim is a software program that modifies bytecodes of a program, which is not a tangible result because, lacking physical components (i.e. memory or processor), the method and software program to modify bytecode and the bytecode being modified constitute abstract ideas. Physical components must be utilized in the method and systems to allow the result of their operation to be rendered tangible.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. **Claims 2-22** are rejected under 35 U.S.C. 102(b) as being anticipated by Angel et al (US Pat: 6,314,558), hereinafter Angel.

8. As per **Claim 2**, Angel discloses the invention substantially as claimed including a method comprising:

a) selecting at least one method of a class for instrumentation (Col. 22, lines 15-25 and Col. 20, lines 24-34);

Art Unit: 2194

b) inserting instrumentation code in the selected at least one method without modifying a source code of the selected at least one method by inserting bytecodes into the selected at least one method (Col. 20, lines 14-23; Col. 2, line 26 – Col 23, lines 30);

c) executing the bytecodes during execution of the at least one method (col. 21, lines 25-64); and

d) generating a call, by the executed bytecodes, to an interface wherein the call comprises information regarding the instrumented at least one method (Col. 19, line 58 – Col. 20, line 13).

9. As per **Claim 3**, Angel further teaches wherein inserting instrumentation code in the selected at least one method comprises generating a wrapper method that contains the instrumentation code and the at least one method (Col. 26, lines 14-31).

10. As per **Claims 4**, Angel further teaches generating a wrapper method comprises:

a) renaming the at least one method from an original name to a new name (Col. 26, lines 14-31);

b) creating a wrapper method with the original name (Col. 3, lines 48-59 and Col. 26, lines 14-31) (Bytecode with the name of the native version of the method is created and instrumented to allow access to the native method, thereby meeting this claim limitation);

c) inserting bytecodes into the wrapper method that when executed generate the call to the interface (Col. 26, lines 14-31) (Bytecode with the name of the native version

Art Unit: 2194

of the method is created and instrumented to allow access to the native method, thereby meeting this claim limitation); and

d) inserting bytecodes into the wrapper method that when executed call the renamed at least one method (Col. 26, lines 14-31).

11. As per **Claims 5**, Angel further teaches wherein generating a wrapper method further comprises setting a flag of the renamed at least one method to private (Col. 26, lines 14-31) (The step of "adding the name as a private native method" meets this claim limitation).

12. As per **Claim 6**, Angel further teaches wherein the selecting at least one method comprises selecting at least one method of a class for instrumentation when the class is being loaded by a java virtual machine (JVM) for execution by the JVM (Col. 19, lines 38-57 and Col. 20, lines 24-34).

13. As per **Claim 7**, Angel further teaches wherein the selecting at least one method comprises selecting at least one method of a class for instrumentation prior to execution of the class by a java virtual machine (JVM) (Col. 19, lines 38-57; Col. 20, lines 24-34 and Col. 21, line 65 – Col. 22, line 14).

Art Unit: 2194

14. As per **Claim 8**, Angel further teaches wherein further comprising monitoring the at least one method using the information regarding the instrumented at least one method (Col. 21, lines 7-19; Col 23, lines 56-59 and Col. 24, lines 12-16).

15. As per **Claims 9-15**, these claims are directed to the system implementing the methods of **Claims 2-8** respectively, and are therefore rejected for the same reasoning as **Claims 2-8** as specified above.

16. As per **Claims 16-22**, these claims are directed to the system implementing the methods of **Claims 2-8** respectively, and are therefore rejected for the same reasoning as **Claims 2-8** as specified above.

### ***Conclusion***

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Peek (US Pat: 5,481,706) and Tyma (US Pat: 6,102,966).

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

19. A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

Art Unit: 2194

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Richard Pantoliano Jr whose telephone number is (571) 270-1049. The examiner can normally be reached on Monday-Thursday, 8am - 4 pm EST.

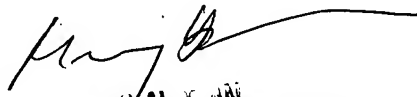
20. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Thomson can be reached on (571)272-3718. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2194

21. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

RP  
02/26/2007

  
MENG-AL T. AN  
SUPERVISORY PATENT EXAMINER  
MAY 2007